

REMARKS

Favorable reconsideration and allowance of the present application are respectfully requested in view of the foregoing amendments and the following remarks.

Currently, claims 31-65 are pending in this application, including independent claims 31, 43, 52, and 58-59. Independent claim 31, for instance, is directed to a heat transfer material that comprises a non-transferable portion and a transferable portion. The non-transferable portion comprises a substrate layer and a release coating layer. The transferable portion overlies the non-transferable portion, and the transferable portion comprises a peelable film layer overlying the release coating layer and an opaque crosslinked polymer layer overlying the peelable film layer. The peelable film layer is also melt-flowable at a transfer temperature. In one embodiment, for example, a design may be created by cutting shapes or letters from the heat transfer material. The release coating layer and substrate layer are then peeled away from the peelable film layer. Thereafter, the peelable film layer is placed against a fabric (e.g., T-shirt) to expose the crosslinked layer. Heat and pressure are then applied so that the peelable film layer melts and penetrates into the fabric at a transfer temperature to permanently bond the crosslinked layer thereon. (See e.g., Appl. p. 6).

In the Office Action, independent claims 31, 43, 52, and 58-59 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,432,258 to Yoshimura, et al. Yoshimura, et al. is directed to a transfer paper and process. As shown in Fig. 1, for instance, the heat transfer paper contains a base 1 with a release layer 3, picture printing layers 5 and 7 on the release layer 3, and a thermosetting adhesive layer 9 on the picture printing layer 7. The picture printing layers 5 and 7 are

formed from known ultraviolet-curing inks, oil-based inks, cold-setting inks, reversible thermochromic inks, etc. (Col. 2, ll. 52-58).

The Office Action asserts that the picture printing layers 5 and 7 are the same as the peelable film layer and crosslinked layer, respectively, as set forth in independent claims 31, 43, 52, and 58-59. Applicant respectfully disagrees. The peelable film layer of independent claims 31, 43, 52, and 58-59 is melt-flowable at the transfer temperature. Nowhere does Yoshimura, et al. disclose that the picture printing layer 5 is melt-flowable at the transfer temperature. In fact, it would be undesirable to use such a melt-flowable picture printing layer 5 due to the likelihood of distorting and/or altering the intended picture during heat transfer.

This distinction is underscored by the significant difference between the heat transfer methods typically employed in Yoshimura, et al. and the present invention. In Yoshimura, et al., the paper is punched and cut to provide a picture. A release paper 11 (Fig. 2) is then peeled off and the thermosetting adhesive layer 9 is applied to a substrate ware 13. Thereafter, the base 1 is peeled off and the ware 13 is heated in an oven to cure the thermosetting adhesive layer 9, which is cured for about 10-20 minutes at 80-170°C. (Col. 6, ll. 28-52). To the contrary, heat transfer may be performed in the present invention by placing a peelable film layer adjacent to the desired material to expose a crosslinked layer. Because the peelable film layer is melt-flowable at the transfer temperature, it is able to melt and penetrate into the fabric to permanently bond the crosslinked layer thereon. This may provide a variety of benefits, including the provision of an image that is durable and resistant to wear and washing.

Thus, for at least the reasons set forth above, Applicant respectfully submits that independent claims 31, 43, 52, and 58-59 are not anticipated by Yoshimura, et al. Yoshimura, et al. was also cited, either alone or in conjunction with U.S. Patent No. 6,358,600 to Agler, et al., to reject dependent claims 32-42, 44-51, 53-57, and 60. Applicant respectfully submits, however, that at least for the reasons indicated above relating to the independent claims, dependent claims 32-42, 44-51, 53-57, and 60 patentably define over the cited references. However, Applicant also notes that the patentability of dependent claims 32-42, 44-51, 53-57, and 60 does not necessarily hinge on the patentability of the independent claims. In particular, some or all of the dependent claims may possess features that are independently patentable, regardless of the patentability of the independent claims.

Further, besides the rejections set forth above, claims 33 and 43 were also objected to in the Office Action for various informalities. In response, Applicant has amended dependent claim 33 to correct the spelling of "formaldehyde." However, Applicant respectfully submits that the spelling for "overlie" is correct in independent claim 43.

In summary, Applicant respectfully submits that the present application is in complete condition for allowance and favorable action, therefore, is respectfully requested. Examiner Dicus is invited and encouraged to telephone the undersigned, however, should any issues remain after consideration of this Amendment.

Please charge any additional fees required by this Amendment to Deposit Account No. 04-1403.

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Respectfully requested,
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